



## ELECTRICAL CHARACTERISTICS @ 25°C

1.0 TURNS RATIO: (P6-P5-P4) : (J6-J3) : 1CT : 1CT  $\pm$  3%  
(P3-P2-P1) : (J2-J1) : 1CT : 1CT  $\pm$  3%

2.0 INDUCTANCE: (P6-P4) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias  
(P3-P1) : 350uH MIN. @ 0.1V, 100KHz, 8mA DC Bias

3.0 LEAKAGE INDUCTANCE: P6-P4 (WITH J6 AND J3 SHORT) : 0.3uH MAX. @ 1MHz  
P3-P1 (WITH J2 AND J1 SHORT) : 0.3uH MAX. @ 1MHz

4.0 INTERWINDING CAPACITANCE: (P6,P5,P4) TO (J6,J3) : 30pF MAX. @ 1MHz  
(P3,P2,P1) TO (J2,J1) : 30pF MAX. @ 1MHz

5.0 DC RESISTANCE: (J6-J3)=(J2-J1) : 1.2 ohms Max.

6.0 RETURN LOSS: (P6-P4)=100 OHMS AND (P1-P3)=100 OHM REF.  
1MHz TO 30MHz : 18dB MIN.  
60MHz TO 80MHz : 12dB MIN.

NOTE: 100 OHMS CONNECTED TO (J2-J1) OR (J6-J3).

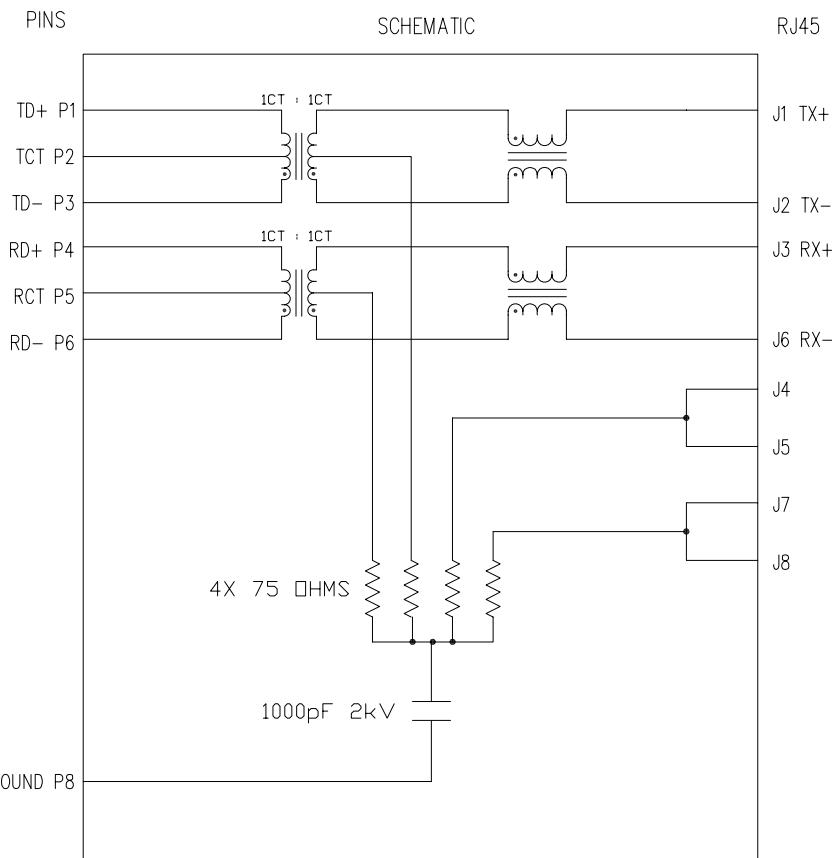
7.0 VOLTAGE WITHSTAND: (J1, J2) TO (P1, P3) : 1500 Vrms  
(J3, J6) TO (P4,P6) : 1500 Vrms

8.0 INSERTION LOSS: RS=RL=100 ohms  
100KHz TO 100MHz : 1.1 dB TYP

9.0 RISE TIME: RS=100 OHMS AND RL = 100 OHMS  
OUTPUT VOLTAGE = 1 V peak : 3.0 nS MAX  
PULSE WIDTH= 112nS : 3.0 nS MAX

10.0 CROSS TALK: 1MHz TO 100MHz : 40 dB TYP

11.0 COMMON TO COMMON MODE ATTENUATION:  
30MHz TO 100MHz : 35dB TYP



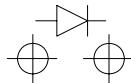
NOTES: 1.0 PINS WITHOUT ELECTRICAL CONNECTION ARE OMITTED.

ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.		[ ] METRIC DIM. AS REFERENCE	
BAIN LIU	03-09-09			TOL. IN INCH	UNIT : INCH [mm]	REV. : B0	
DRAWN BY	DATE	MagJack® 10/100BT VERTICAL, SHIELDED PATENTED	FILE NAME SI-46001-F.DWG	.X		SCALE : N/A	SIZE : A4
R.S.ZHANG	03-09-09			.XX			
				.XXX	$\pm 0.005$		PAGE : 2

**bel**  
COMPONENTS FOR A  
CONNECTED  
PLANET



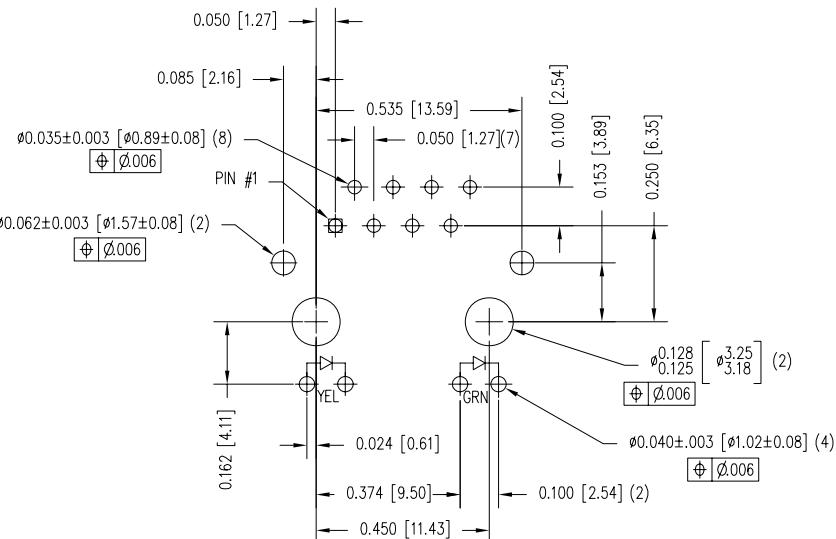
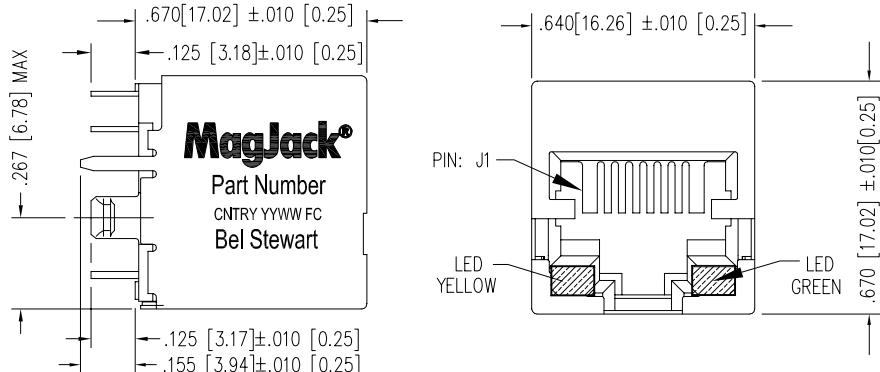
LED POLARITY  
(ENLARGED VIEW)



SINGLE COLOR LED

LED SPECIFICATION			
STANDARD LED	WAVELENGTH	FORWARD V (MAX)	*(TYP)
GREEN	565 nm	2.5 V	2.2 V
YELLOW	590 nm	2.5 V	2.1 V

\*WITH A FORWARD CURRENT OF 20 mA (TYP)



P.C.B. RECOMMENDED HOLE LAYOUT  
SEEN FROM COMPONENT SIDE

ALL CENTERLINE DIMENSIONS ARE BASIC

NOTES:

1. CONNECTOR MATERIALS:  
HOUSING: THERMOPLASTIC UL94 V-0  
CONTACT/SHIELD: COPPER ALLOY  
SHIELD PLATING: NICKEL OR TIN  
CONTACT PLATING: SELECTIVE GOLD,  
50 MICRO-INCHES MIN. IN CONTACT AREA.
2. PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED.  
SEE ELECTRICAL DRAWING FOR OMITTED PINS.
3. TOLERANCES COMPLY WITH F.C.C. DIMENSION REQUIREMENTS.
4. ALL TOLERANCES NOT OTHERWISE SPECIFIED TO BE  $\pm .005$  [0.13]
5. WAVE SOLDER COMPATIBLE – PREHEAT 125°C/90SECS.

ORIGINATED BY	DATE	TITLE
BAIN LIU	03-09-09	
DRAWN BY	DATE	MagJack® 10/100BT VERTICAL, SHIELDED PATENTED
R.S.ZHANG	03-09-09	

MagJack®  
10/100BT  
VERTICAL, SHIELDED  
PATENTED

PART NO. / DRAWING NO.  
SI-46001-F  
FILE NAME  
SI-46001-F.DWG

STANDARD DIM.  
TOL. IN INCH  
.X  
.XX  
.XXX  $\pm .005$

[ ] METRIC DIM. AS REFERENCE  
UNIT : INCH [mm] REV. : B0  
SCALE : N/A SIZE : A4  
PAGE : 3

bel  
COMPONENTS FOR A CONNECTED PLANET